EXHIBIT 4

BIOLOGICAL ASSESSMENT
MARTINEZ REGIONAL SHORELINE
MARTINEZ BAY TRAIL COORIDOR PROJECT

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PROJECT DESCRIPTION: The project is part of the San Francisco Bay Trail and is located within Martinez Regional Shoreline (owned by the East Bay Regional Park District), the City of Martinez, and a District easement from the Union Pacific Railroad. The proposed paved trail segment begins at Carquinez Scenic Drive at the Nejedly Staging Area and continues to Berrellesa Street. The trail is approximately 2350 feet long and the width varies from 8 to 10 feet. Some trail sections will have a 2-foot wide aggregate base rock shoulder on both sides. Approximately 700 ft. of the trail alignment is in a eucalyptus dominated woodland with an ephemeral stream. Several large eucalyptus and small live oaks will be removed during the non-nesting season (August – January). Prior to the trees being removed qualified District biologists will conduct breeding bird surveys. A 35 ft long clear span bridge will be used to cross the stream. A 36" culvert will be used where the trail intersects and crosses a small wetland. The bridge and culvert will be installed during the dry season and/or under dry conditions. The proposed trail is located in Contra Costa County at 38°01.242N: 122°08.797W (see map).

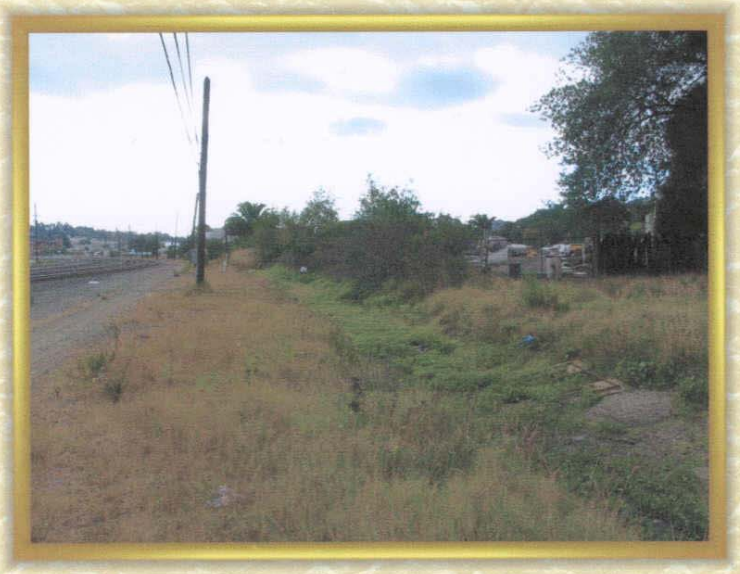
The project also includes enhancement of an existing wetlands. The proposed mitigation site is within Martinez Regional Shoreline and bayside of Union Pacific Railroad and located at 38°01.156N: 122°08.657W. Currently an unpaved maintenance road bisects this wetland. This road crosses an existing small partially clogged culvert that restricts flow to the site. Consequently, the majority of the wetland receives minimal tidal flow. The proposed enhancement includes removing this culvert and maintenance road. Minor grading will be performed to restore flow across the old roadbed. Exotic vegetation shall be removed, especially from existing tidal channels, and native vegetation will be planted at various locations within the mitigation sites. The proposed project will replace an existing 4'X10' wooden pedestrian footbridge crossing a tidal slough with a 12'X16' prefabricated vehicle bridge. This will allow the District's maintenance vehicles to utilize the elevated pedestrian trail instead of unpaved old roadbed. Removal of the roadbed will provide 4,130 square feet of restored wetlands. Overall, this restoration will improve tidal and wetland conditions for 30,330 square feet, which should significantly enhance the site for a variety of emergent wetland species.

BIOLOGICAL CONDITIONS: This Martinez Regional Shoreline trail project transverses a blue gum eucalyptus (*Eucalyptus globules*) dominated forest with an ephemeral stream and into a highly altered railroad track corridor with some fresh water wetlands habitat. The vast majority of the trail is aligned within the District's easement

along the Union Pacific Railroad corridor. This corridor consists of railroad tracks on a road rock surface and contains a series of narrow wetlands adjacent to a hillside and/or asphalt plant. These seasonal wetlands are highly degraded and support relatively few species. The wetland vegetation is dominated by several grass species, cattails (*Typhus sp.*), willows (*Salix sp.*), and exotic trees. The most abundant invertebrates are water boatmen (*Sigara sp.*) and mosquito larvae. Although mallards, American coots, and gull species may occur in the ponding water, these relatively shallow wetlands are typically dry by July, and we have not observed any amphibians or fish in these waterbodies. A variety of passerines forage in the willows, eucalyptus, and oaks. The species composition in these trees seasonally varies with scrub jays, ruby crowned kinglets, yellow-rumped warblers, white-crowned sparrows and dark-eyed juncos are the most common species. The eucalyptus also provides habitat for nesting raptors such as red-shouldered hawks, red-tailed hawks, American kestrels, and great-horned owls. Qualified District biologist(s) shall conduct raptor surveys prior to construction and nest sites will be avoided.

The biological conditions of the proposed wetland enhancement and mitigation site are frequently inundated by tide or may seasonally pond with fresh water. Tidal water moves up a heavily vegetated channel and passes through a narrow partially clogged culvert. A bare earthen roadbed bisects the site. Otherwise, these areas are covered by brackish marsh vegetation dominated by pickleweed (*Salicornia virginica*), creeping wild rye (*Leymus triticoides*), perennial pepperweed (*Lepidium latifolium*), and salt grass (*Distichlis spicata*) (LSA 2002 report). A California Department of Fish and Game Natural Diversity Database (CNDDB) search shows that the project enhancement site is northern coastal salt marsh. In addition, CNDDB has known locations of Mt Diablo fairy lantern (*Calochortus pulchellus*), listed 1B by CNPS, and Diablo helianthella (*Helianthella castanea*), a federal species of concern and listed 1B by CNPS, occurring upslope in terrestrial habitat and over 200 feet from the project site and upslope (see CNDDB map). We have not observed or detected any state or federally endangered, threatened, or species of concern at this site (see resource inventory checklist). However, improving tidal flow and wetland conditions should significantly enhance the site for a variety of species, and potentially provide habitat for California black rail, a state threatened species and federal species of concern, California clapper rail, a state endangered and federal endangered species, and salt marsh harvest mouse, a state endangered and federal endangered species.

TRAIL CORRIDOR



WETLANDS
ENHANCEMENT SITE